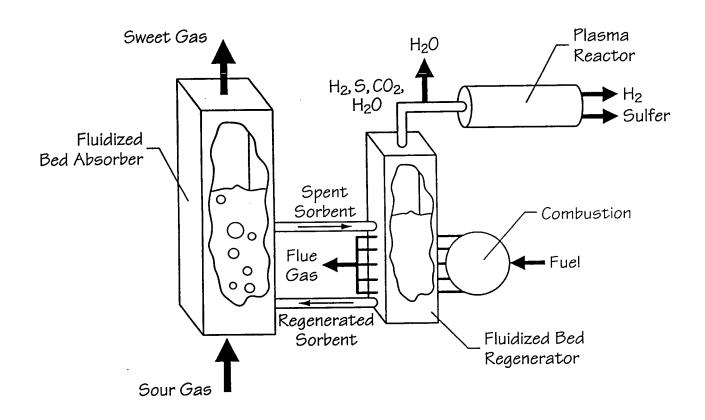
Fig. 1



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Fig. 2 P = 1000 psi T = 600K Q = 4226cumd P = 1000 psi Sweet Gas  $(H_2S = trace;$ T = 656K  $CO_2 = 2\%$ HX2 Heat transfer Q = 5343cumd P = 1000 psi CO (16) rate = 280KW T = 740K N2, H2O = 0.96MMBtu/hr Q = 6030cumd P = 1000 psi (19) T = 313K P = 1000 psi Q = 42755 cumdT = 323KQ = 3522cumdBed diameter = 0.3m ADS2 (Removal of CO<sub>2</sub>)  $U_o/U_{mf} = 3$ Bed diameter = 1.5m 8.8Kg/s PC3 Heat transfer  $U_o/U_{mf} = 3$ rate = 7.85KW = 2.66MMBtu/hr CO2, N2, H2O P = 1000 psi T = 323KQ = 901cumdNatural Gas with CO2 (5 (2) P = 1000 psi T = 601KP = 1000 psi Q = 3952cumdT = 313KQ = 44140cumd P = 1000 psi P = 1000 psi T = 802K T = 650K Q = 4731cumdHX1 Heat transfer Q = 3836 cumd6 rate = 280KW P = 15 psi P = 15 psi O.96MMBtu/hr T = 323KT = 323K Q = 239972cumdQ = 142016cumd 10 (12) 3 (8) (9) P = 1000 psi T = 802K Q = 4731cumdPCR Bed diameter = 0.3m 27.2Kg/s ADS1 ADS3 (Removal of H<sub>2</sub>S  $U_o/U_{mf} = 3$ (Removal of H<sub>2</sub>S, and H<sub>2</sub>O) H<sub>2</sub>O and CO<sub>2</sub>) **RGN1** 8.2Kg/s Bed diameter = 1.5m Bed diameter = 0.2m PC2 Heat transfer P = 15 psi T = 1356K (13) rate = 1128KW  $U_o/U_{mf} = 3$  $U_o/U_{enf} = 3$ P = 1000 psi = 3.84MMBtu/hr Q = 126404cumd T = 323KQ = 1351cumdCOND Heat removal P = 1000 psi rate = 5000KW T = 323K= 17.2MMBtu/hr Q = 221cumdP = 1000 psi T = 323K P = 1000 psi (14) T = 323KQ = 221cumd Q = 3599 cumdSour Gas 52, H2O

 $H_2S = 1$ %;  $CO_2 = 5$ %;  $U_{\rm inf} = 0.1 {\rm ms}^{-1}$  @ 1000 psi, 323K;  $dp = 1.5 {\rm mm}$ 

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